



100

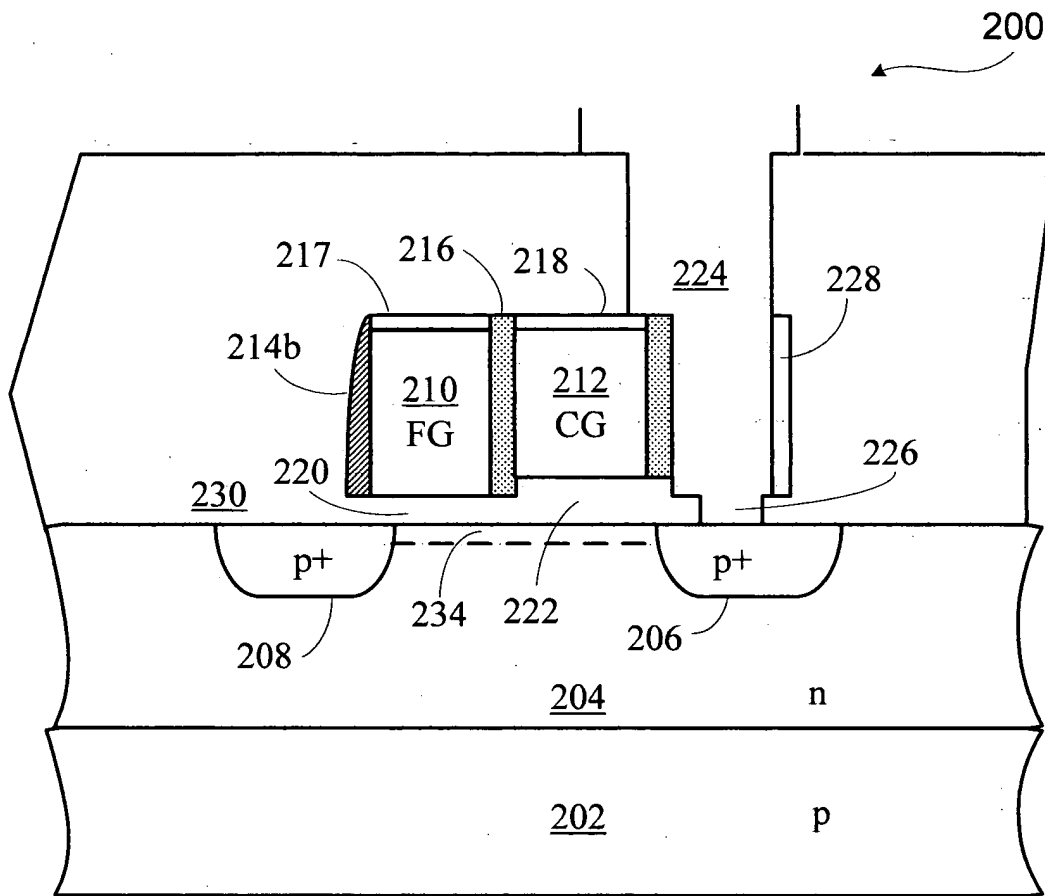


FIG. 2

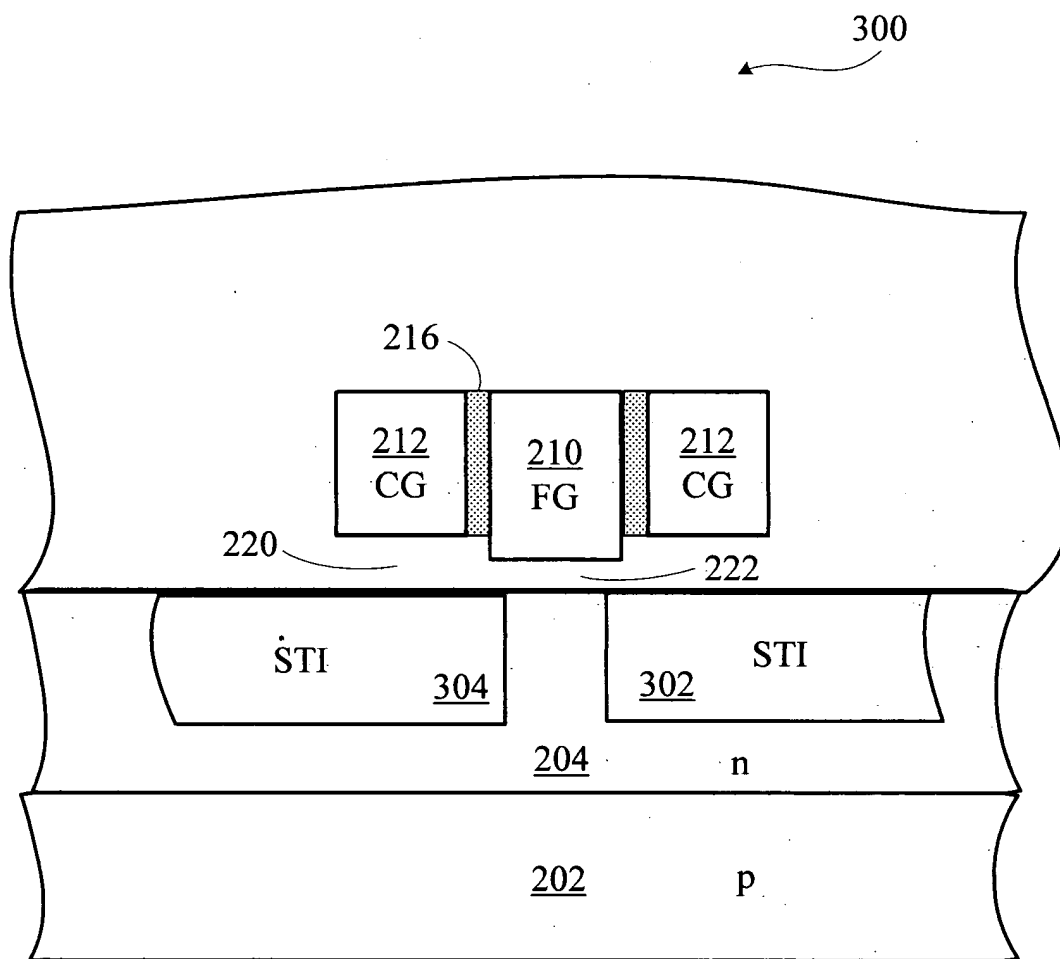


FIG. 3

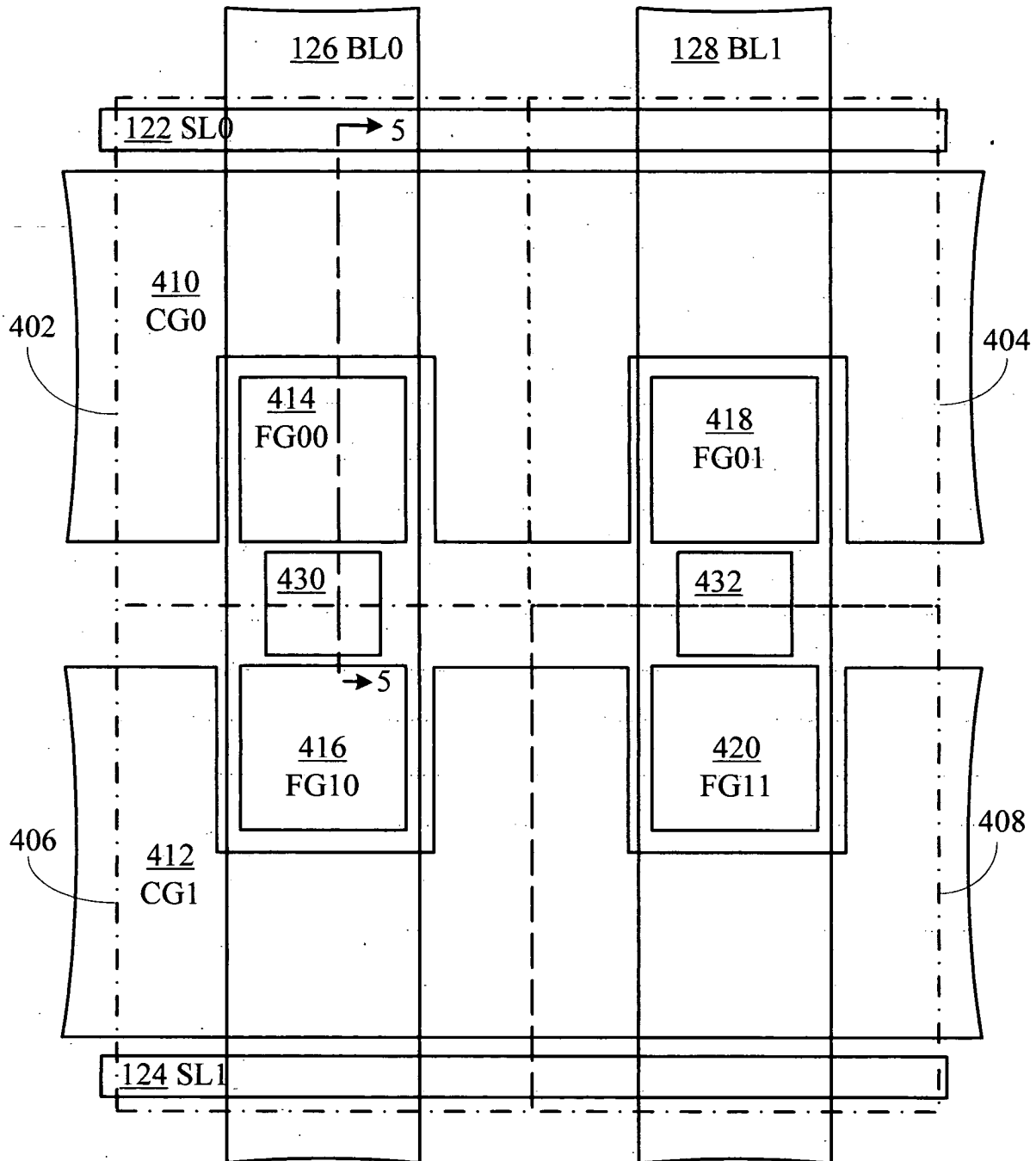


FIG. 4

5/11

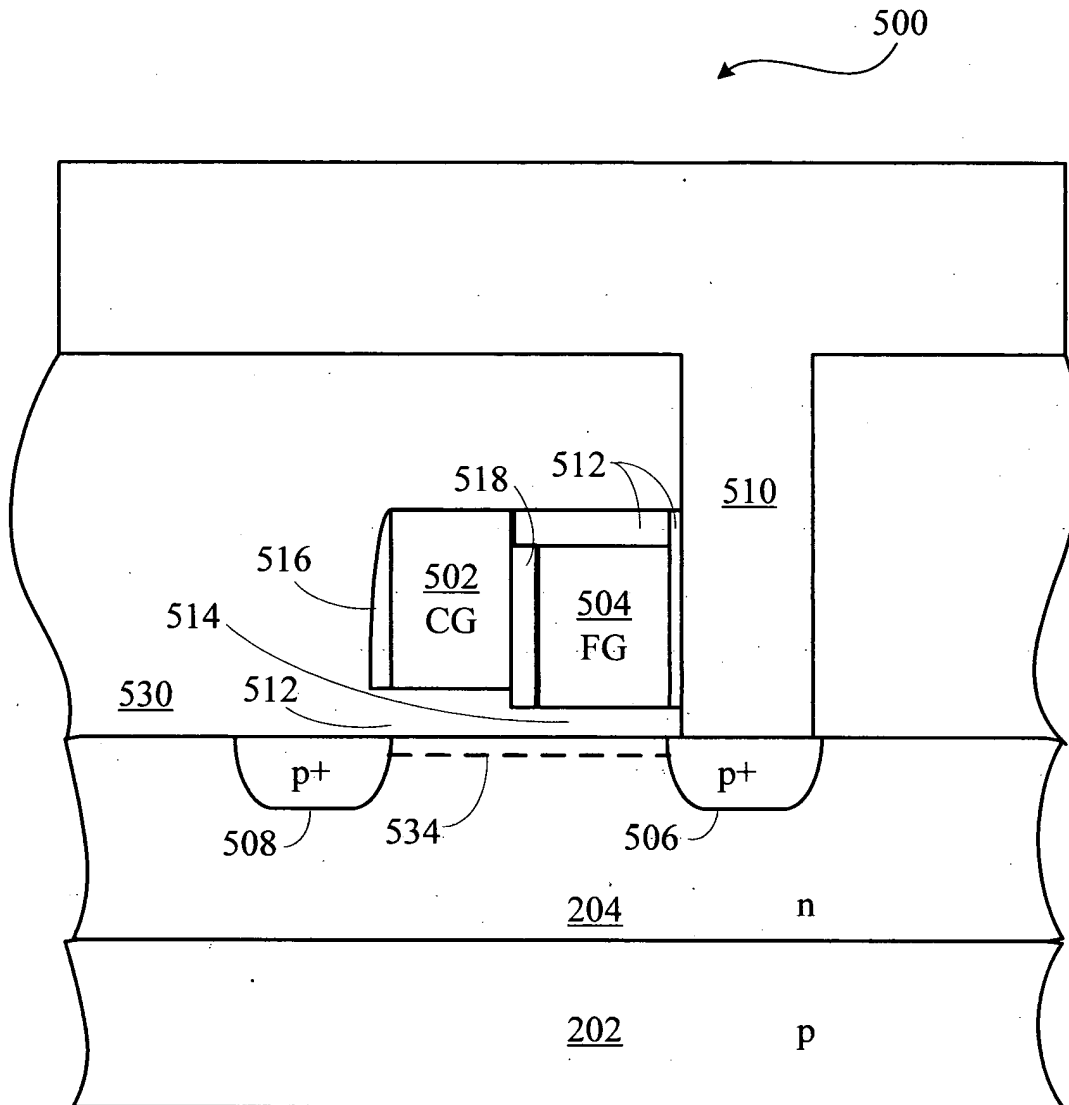


FIG. 5

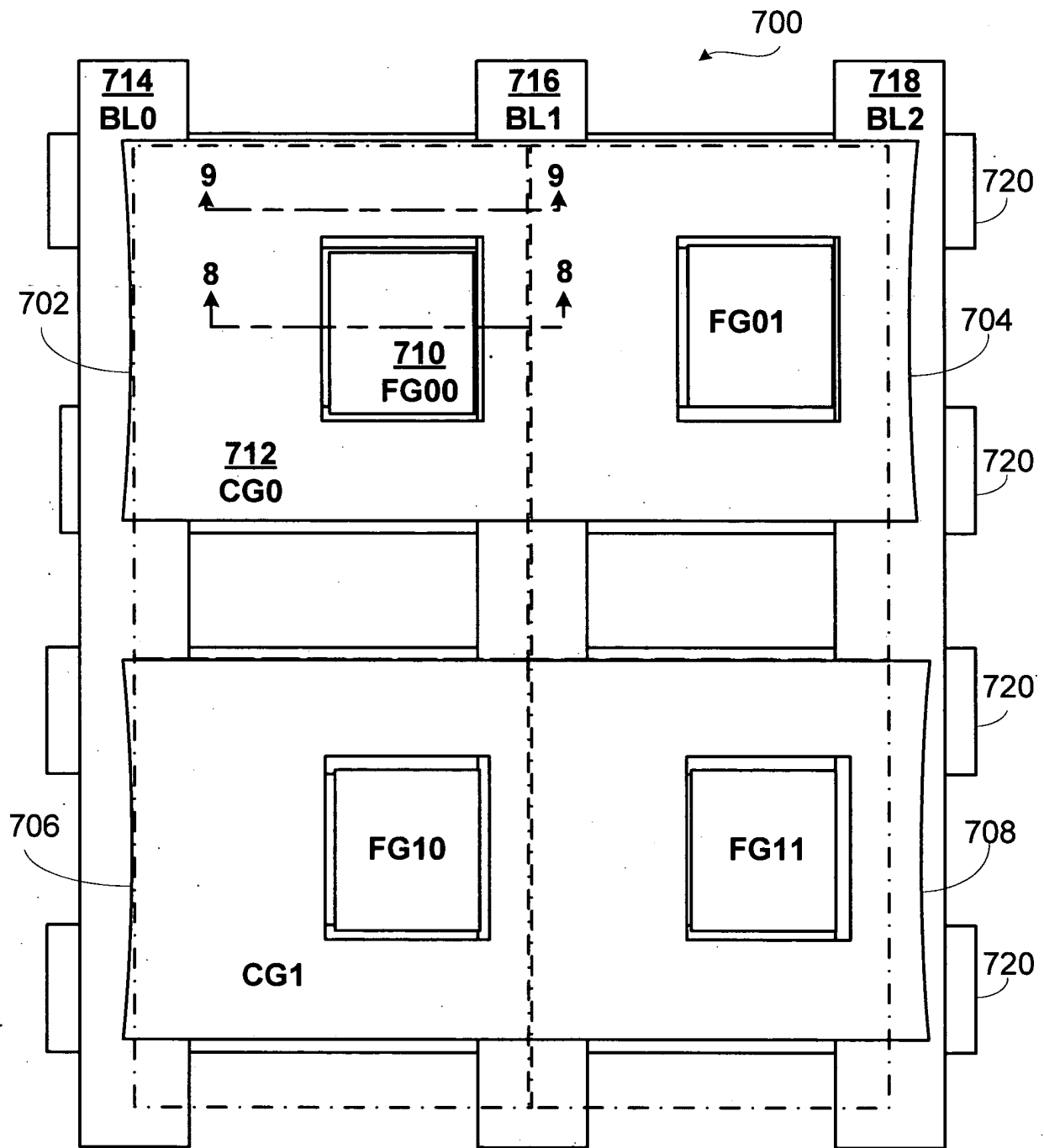


FIG. 7

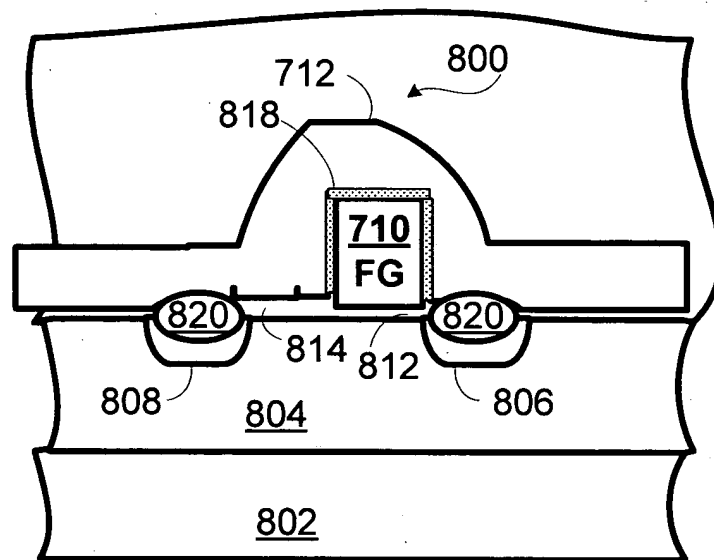


FIG. 8A

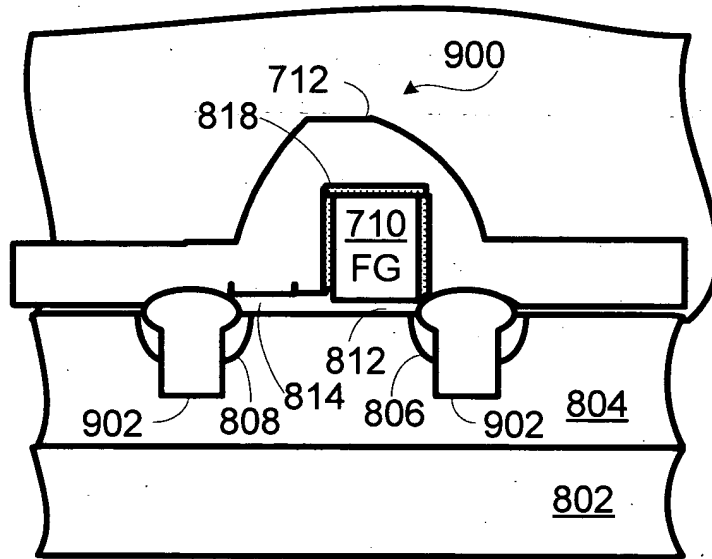


FIG. 8B

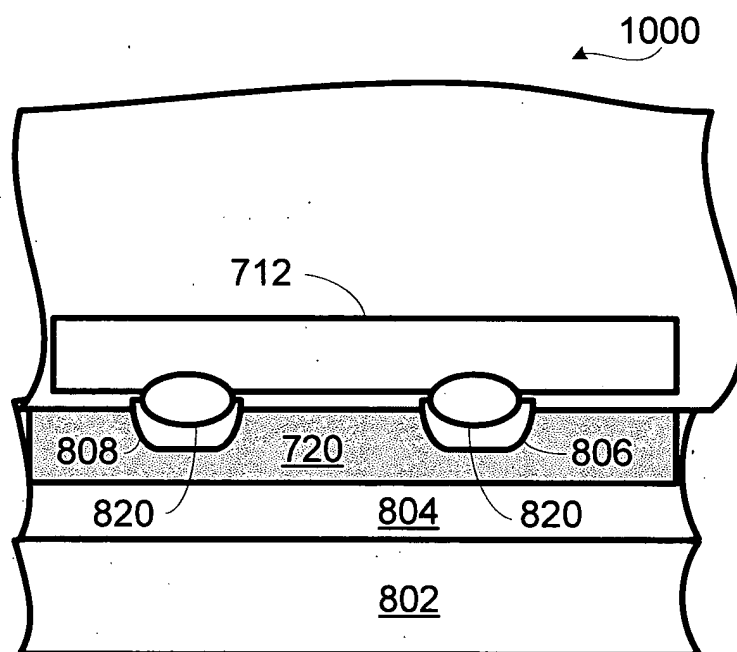


FIG. 9

P-Type Diffusion

Channel Hot Electron program		
	select	unselect
Drain	0v	
Source	Vpp	Vpp
CG	Vppr	Vpp
well	Vpp	Vpp

Soft avalanche hot electron (SAHE) program		
	select	unselect
Source	x	x
Drain	Vnn	Vcc
CG	Vpp	Vnn2
well	Vcc	Vcc

N-Type Diffusion

Channel hot electron (CHE) program		
	select	unselect
Drain	Vpp	x
Source	0v	0v
CG	1v to Vcc	0v
well	0v to Vcc	0v

Channel program		
	select	unselect
Source	x	x
Drain	Vnn	0v
CG	Vpp	Vnn
well	Vnn	Vnn

Erase for both P-Type and N-Type		
	select	unselect
Drain	x	x
Source	Vpp	x or Vpp
CG	Vnn	Vpp
well	Vpp	Vpp

Note:

1. Vnn = -4.5v to -10v
2. Vnn2 = 0v to -4.5v
3. Vpp = 5v to 11v
4. Vpp2 = 4v to 8v
5. Vppr = 0v to Vpp, ramp up or ramp down

FIG. 10